TOWN OF BEDFORD DEPARTMENT OF PUBLIC WORKS



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Date: February 23, 2022

To: Arbor Resources Committee

Tree Warden

From: Jeanette Rebecchi, Transportation Program Manager

Re: Town Tree Removal – Minuteman Bikeway Extension Project

The Minuteman Bikeway Extension Project extends the popular Bikeway to just before the Bedford/Concord Town Line via a 12-foot-wide paved path along the existing Reformatory Branch Rail Trail. To connect the Bikeway to the Trail, the south side of Railroad Avenue will also be made accessible to bicycles and pedestrians via a 10-foot-wide shared use path, and a sidewalk constructed on the north side. This project is unique in that the construction will be funded through the MPO's Transportation Improvement Program (TIP) using state and federal funds totaling \$10.2M million. As a TIP project, the design falls under MassDOT control and review. MassDOT (not the Town) will be advertising the project and supervising construction, which is anticipated to take place between Fall, 2023 – Summer, 2025.

Now that the project is at the 100% design phase, the Department of Public Works is requesting an application for Town tree removal in accordance with the Town of Bedford Tree Policy. Per the Tree Policy, optional BARC meetings were held on February 13, 2020, August 18, 2021, and January 27, 2022 to present the design plans and discuss the project with the Committee and any interested residents. Updates have also been provided regularly at BARC meetings by the DPW Director to keep the committee apprised of the project.

Quantification and Mitigation of Tree Removal

The enclosed tree removal plan show a total of 20 public trees being removed within the Town right of way on Railroad Ave and Concord Road. Six of these trees are 6–18" DBH, and three are greater than 18" DBH. 68 trees are proposed to be planted on Town property throughout the project, which is more than the one-to-one mitigation required by the Tree Policy.

4.34 acres of trees will also be cleared on Town land under BARC's jurisdiction along the existing Reformatory Branch Trail. While the total number of acres sounds extensive, the project is primarily pushing back the forest along the approximate 1.7 miles of former rail corridor in order to access, widen where necessary, and pave the existing cleared trail. The largest areas of tree clearing will occur at the proposed Lavender Lane parking lot and Route 62 culvert and ramp. Per the Town Tree Policy Appendix, mitigation is required at a rate of \$5,000 per acre. This results in mitigation payment of \$21,700.

Replacement Trees

The Town had previously requested 3.5" DBH replacement trees for this project per the Tree Policy Appendix, however MassDOT has denied our request and will withhold funding if 3.5" caliper trees are used. As such, the DPW is revising the design plans to reflect the required 2.5" caliper trees. The MassDOT landscape architect reviewing the project has provided the following information for the Committee:

- MassDOT's planting goal is to create a healthy, living low maintenance landscape for the long term.
- Small trees adapt better (there is a lot of literature out there to support this), require less water and fertilizers when transplanted, and have much better root balls than large caliper trees. A bad root ball will shorten the life of a tree no matter how much care the tree is given.
- As the likelihood of small trees surviving and become self-sufficient is much higher, using smaller caliper trees is in the best interest of the Town, the future environment, and the public who is paying for the trees and wants to enjoy the attractive and comfortable environment that (living) trees create.
- If there is a justifiable reason for a tree (i.e., up-limbing required), then perhaps a large caliper is acceptable in that location.
- Landscape Design would recommend reducing the size of the trees and increasing the quantity of trees (and diversity of trees), provided there is proper design intent and thought put into the layout.
- More trees and more diversity will provide more habitat, more environmental services, and better ensure that there will be sufficient trees out there even if we lose some of them due to poor material, lack of water, or environment conditions.